



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named

Inventor : Kent J. Forbord

Appln. No. : 09/104,947

Filed : June 25, 1998

Title : HIGH PERFORMANCE STANDARD  
CONFIGURATION DISC DRIVE HAVING  
SMALLER-THAN-STANDARD DISCS

Docket No. : I169.12-0314

Group Art Unit: 2754

Examiner: Wolff, J.

**DECLARATION OF RUDY THIBODEAU**

Assistant Commissioner for Patents  
Washington, D.C. 20231

I CERTIFY THAT THIS PAPER IS BEING SENT BY U.S. MAIL,  
FIRST CLASS, TO THE ASSISTANT COMMISSIONER FOR  
PATENTS, WASHINGTON, D.C. 20231, THIS 10 DAY OF

September, 1999.  
Rosanne M. D.  
PATENT ATTORNEY

Sir:

Rudy Thibodeau states:

1. I am Executive Director of High Performance Marketing for Seagate Technology, Inc. (herein "Seagate"). Seagate is in the business of manufacturing and selling rigid magnetic disc drives for inclusion as the main memory in computer mainframes (servers) made by others. As Executive Director of High Performance Marketing, I am in charge of the marketing efforts of high performance rigid disc drives for inclusion in computer servers made by others.

2. I have been employed by Seagate and its predecessor since about 1968, having served in various engineering and management positions in connection with the production of disc drives, including field engineer and Manager of Project Management. Since 1986, I have been employed by Seagate and its predecessor in the marketing of disc drives. My duties in marketing disc drives included research and analysis of market impact of disc drives manufactured by Seagate and its competitors, including IBM, Fujitsu, Quantum, Western Digital, Hitachi and others.

3. As Executive Director of High Performance Marketing, I am responsible for the marketing efforts of the Cheetah 9LP and 18HH and the later 18LP and 36HH rigid disc drives.

My duties include market research and analysis of disc drives that compete with the Cheetah® 9LP, 18HH, 18LP and 36HH disc drives.

3. I have reviewed the above-identified patent application. Broadly, the patent application describes two versions of a high-performance disc drive having a housing with a standard three-dimensional configuration containing a stack of discs each having a diameter smaller than the diameter of the standard discs of the standard configuration. Most specifically, the application describes a half-high and a low profile 3½ inch standard disc drive containing discs having disc diameters that are 84 mm rather than the standard 95 mm. The half-high disc drive contains twelve recording discs rather than ten as in standard half-high drives, and the low profile disc drive contains six magnetic recording discs rather than five as in standard low profile drives. Seagate markets the disc drives described in the patent application as the second generation of Cheetah disc drives, namely the Cheetah 9LP (low profile) and 18HH (half high) disc drives. The first generation Cheetah disc drives were the 4LP and 9HH disc drives. Seagate's second generation Cheetah 9LP and 18HH disc drives first introduced to the industry the concept of what Seagate refers to as "reduced diameter media technology." This technology is the concept of employing smaller-than-standard discs in disc drives having housings that have standard three-dimensional configurations. The second generation Cheetah 9LP and 18HH disc drives employ discs having a diameter of 84 mm rather than the standard 95 mm. The two models differ from each other in that the 9LP disc drive is a low profile disc drive having six discs (instead of the standard five) and is capable of storing about nine gigabytes of information, whereas the 18HH disc drive is a half-high disc drive containing twelve magnetic discs (instead of the standard ten) and has a capacity of storing about 18 gigabytes of information.

4. Since the filing of the above-identified application, Seagate Technology, Inc. has developed, and has introduced, a third generation of Cheetah disc drives known as the Cheetah 18LP and Cheetah 36HH disc drives. These disc drives also incorporate the "reduced diameter media technology" described and claimed in the above-identified application, as well as additional technology developed since the filing of the above application.

5. Seagate's second and third generation Cheetah disc drives (the 9LP, 18HH, 18LP and 36HH) have enjoyed phenomenal commercial success since their introduction. The second generation Cheetah disc drives were first shipped by Seagate on October 27, 1997 (see press

announcement of Exhibit A). Attached as Exhibit B is a copy of a press release issued by Seagate on September 28, 1998 announcing that the Cheetah family of disc drives are used in the top ten computer servers, as rated by the TPC benchmark test. The specific models of Cheetah disc drives referred to in the press release of Exhibit B include the second generation Cheetah 9LP and 18HH disc drives that are described in the above application. See also Exhibit C which is a press release dated May 26, 1998 describing use of the Cheetah 9LP disc drive (described in the above application) in Hewlett-Packard's NetServer system. Attached as Exhibit D is a copy of a press release issued by Seagate on March 15, 1999 announcing the shipment of 2 1/2 million Cheetah disc drives. While this figure includes shipments of the earlier Cheetah 4LP and 9HH disc drives, which did not include Seagate's reduced diameter media technology that is the subject of the above application, I estimate, based on records of Seagate Technology, Inc. that are available to me and that I have inspected for this purpose, that as of March 15, 1999, the date of issuance of press release, more than 1.8 million second and third generation Cheetah disc drives had been shipped by Seagate Technology, Inc. containing the reduced-diameter media technology that is the subject of the above-identified application. Moreover, nearly all of the reduced diameter Cheetah drives were the second generation Cheetah drives, because the third generation Cheetah drives were just then being introduced. Based on records of Seagate Technology, Inc. that are available to me and that I have inspected, as of August 1, 1999, Seagate Technology, Inc. has shipped more than 3.6 million second generation Cheetah disc drives and nearly 150,000 third generation Cheetah disc drives.

6. In my experience in the magnetic disc drive industry, I have never seen a magnetic disc drive family enjoy such success and popularity in the market as the second generation Cheetah disc drives. Attached as Exhibit E is a list of 46 industry awards for the Cheetah 9LP and 18HH disc drives granted since about May 1998. These awards cite the unexpectedly cooler performance and reduced seek times as reasons for the superior performance of the Cheetah 9LP and 18HH disc drives. See also Exhibit F which is a press release dated April 20, 1998 describing awards won by Seagate drives, including the Cheetah 9LP drive.

7. There are several manufacturers of disc drives who also manufacture computer mainframes (servers). These organizations usually place their own manufactured disc drives into the computers they market, and seldom purchase disc drives from other manufacturers, such as Seagate. International Business Machines Corporation (IBM), Fujitsu and Hitachi each


manufacture computer mainframes and disc drives and assemble their own disc drives into their computer mainframes. Nevertheless, each of IBM, Fujitsu and Hitachi are customers of Seagate Technology, Inc. for Cheetah second and third generation disc drives for use in their computer mainframes.

8. Since the introduction of Seagate's second generation Cheetah 9LP and 18HH disc drives, the reduced-diameter media technology developed by Seagate Technology, Inc. and implemented into the second generation Cheetah disc drives has been emulated by other disc drive manufacturing organizations, including IBM, Quantum, Fujitsu and Hitachi.

9. The awards granted for the second generation Cheetah 9LP and 18HH disc drives, the phenomenal ship records and market acceptance of the second and third generation Cheetah disc drives, purchase by other manufacturers of disc drives for inclusion in their computer mainframes over drives of their own manufacture, the emulation of reduced diameter media technology by competitors, and superior performance of the drives demonstrates an unusual commercial success of the reduced diameter media Cheetah drives of Seagate Technology, Inc. In my opinion, this commercial success is a result of the reduced diameter media employed in the Cheetah drives.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: September 7, 1999

  
Rudy Thibodeau

*For Immediate Release*



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SEAGATE

**SEAGATE'S 10,000-RPM CHEETAH 9LP/18 DISC DRIVE FAMILY LEAPS TO RECORD-SETTING  
LEVELS OF PERFORMANCE**

*Industry's only second-generation, 10,000-rpm drive offers new breakthroughs like greater than 20MB/sec transfer rates and a sub-6 msec average seek time*

SCOTTS VALLEY, Calif. - October 27, 1997 - Seagate Technology, Inc. (NYSE:SEG) today debuted the second generation of the Cheetah disc drive family--the world's first disc drives to offer 10,000-rpm spindle speeds for increased data throughput and lower latency times. The new Cheetah 9LP low-profile and Cheetah 18 half-height distinguish themselves from other product offerings by leveraging Seagate's experience in integrating 10,000-rpm disc drives with major OEMs and distributors. With the new Cheetah, users are better able to quickly store and manage large amounts of information, part of Seagate's commitment to deliver best-in-class products to help people get their information when, where, and how they want it.

"Customers have shown great interest in 10,000-rpm technology disc drives for use in a wide variety of high-performance applications, ranging from enterprise servers and arrays to personal workstations," said Crawford del Prete, vice president of International Data Corporation's Storage Research Program. "Seagate established the 10,000-rpm performance standard 12 months ago, with the initial Cheetah introduction; it is now building on the family. With impressive transfer rates, a sub-6 msec seek time and improved power efficiency, it breaks new ground in the high-end applications."

The next-generation Cheetahs offer capacity points of 4.5 Gbytes, 9.1 Gbytes, and 18.2 Gbytes. These drives continue Seagate's tradition of offering the most advanced storage interface technologies, Fibre Channel-Arbitrated Loop (FC-AL) and Ultra2 SCSI, including support for low-voltage differential (LVD). Sustained formatted data transfer rates over 21 Mbytes/sec provide users with the fastest data throughput of any drive on the market today. Combining the high-performance interfaces, 21 Mbyte/sec data transfer rates, and 2.99 msec latency with the lightning-fast seek times of 5.2 msec on the low-profile or 5.7 msec on the half-height models, the new Cheetahs provide industry-leading performance for the most demanding applications.

The Cheetah's target markets are all related to the drives' performance attributes. Transaction processing, data mining, data warehousing, professional video, and graphics are all key applications for the Cheetah family. The primary markets are in the department and enterprise servers, central storage environment, and high-end workstations. The secondary markets include the PC servers, personal workstations and high-end PCs. Any time

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an application is time- or speed-sensitive, the Cheetah class of products from the first and second generation provides users with tremendous value.

The new Cheetah family, with a 25% reduction in power, are within 15% of the energy-efficient Seagate Barracuda family of drives. This allows OEMs and integrators the option of using this class of drive in an increased number of platforms and applications.

Samples of the Cheetah 9LP and Cheetah 18 will be available for major OEMs in early November, with volume production planned to begin in the first calendar quarter of 1998. Prices for single evaluation units are set at \$1755 for the 18-Gbyte Cheetah 18 (ST18202), \$1090 for the 9.1-Gbyte Cheetah 9LP (ST39102), and \$655 for the 4.5-Gbyte Cheetah 9LP (ST34502). The pricing for the new Cheetah family will be approximately 15% above the industry-leading Barracuda series. With these two lines, Seagate's Cheetah and Barracuda product sets provide customers with the best balance between performance and value. Original equipment manufacturers (OEMs) may contact their Seagate sales representative for volume pricing. More information and detailed technical specifications regarding Seagate's new Cheetah 9LP and Cheetah 18 disc drives are available online at <http://www.seagate.com/vpr.shtml>.

Seagate Technology, Inc. (NYSE:SEG) is a leading provider of technology and products enabling people to store, access, and manage information. The Company is committed to providing best-in-class products to help people get their information when, where and how they want it. Seagate is the world's largest manufacturer of disc drives, magnetic discs and read-write heads, a market leader in tape drives, and a leading developer of software for information availability, access and analysis. With nearly \$9 billion in revenues for its 1997 fiscal year, Seagate can be found around the globe and on the World Wide Web at <http://www.seagate.com>.

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SEAGATE

**SEAGATE 10,000-RPM CHEETAH DISC DRIVES POWER THE TOP TEN SERVERS,  
AS RATED BY TPC INDUSTRY BENCHMARK TEST**

*Cheetah disc drive family provides the industry's best servers with ultimate performance-per-dollar*

SCOTTS VALLEY, Calif. – September 28, 1998 – Recent industry-wide tests<sup>1</sup> have concluded that Seagate Technology, Inc.'s (NYSE: SEG) 10,000-rpm Cheetah family of disc drives boosts performance in all of the top ten server systems. These systems, all driven by Seagate's Cheetah, provide the best performance-per-dollar in benchmarks developed by and tested under the guidelines of the Transaction Processing Performance Council (TPC). The TPC, an independent organization primarily composed of computer system vendors, is widely recognized as a leading authority of objective server performance modeling and rating.

"These TPC tests spotlight three clearly-evident trends," said Don Kelly, Seagate's senior vice president of High-Performance Products. "First, the server industry discovered and is leveraging the performance advantage of Seagate Cheetah disc drives, which offer the best data throughput. Second, these results indicate that Seagate's Cheetah drives are indeed the 10,000-rpm drive-of-choice. Finally, considering that the test results highlight top performance-per-dollar, the Cheetah is not only a top performer, but a top value as well."

"For over ten years, the Transaction Processing Council has served the IT community by providing objective benchmarks and resources for server market, with results available on our website," said Kim Shanley, Chief Operating Officer of the Transaction Processing Council. "The TPC-C list of top ten systems, as ranked by price/performance, communicates which systems are providing the greatest transaction processing value in the industry. In addition to providing an understanding of performance at the server system level, TPC benchmarks provide valuable insight into the performance of subsystem performance, particularly disk I/O performance."

Some of the top-rated servers, as ranked by the TPC, include models from Acer's Altos, Compaq's ProLiant, Dell's PowerEdge, IBM's Netfinity, and Unisys's Aquanta series. The TPC benchmark detailing the top performance-per-dollar servers can be directly accessed online at [http://www.tpc.org/new\\_result/tpp.idc](http://www.tpc.org/new_result/tpp.idc).

- more -

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Seagate Pounces to the Top of TPC Test Results  
2-2-2

Seagate's Cheetah disc drives were among the first available with the Ultra2 SCSI interface and seek times as low as 5.2 msec. The fusion of a high rotational speed and lightning-quick seeks affirms why the Cheetah is used in top-performing systems. The Cheetah 9LP and Cheetah 18 are currently in volume production.

The Transaction Processing Council can be reached on the worldwide web at <http://www.tpc.org>. The website also provides TPC test results free of charge. For more information, contact the TPC at (408) 295-8894.

Seagate Technology, Inc. (NYSE:SEG) is a leading provider of technology and products enabling people to store, access, and manage information. The Company is committed to providing best-in-class products to help people get information when, where and how they want it. Seagate is the world's largest manufacturer of disc drives, magnetic discs and read-write heads, an innovator in tape drives, and a leading developer of Enterprise Information Management software. Seagate can be found around the globe and on the World Wide Web at <http://www.seagate.com>. For automated news, stock and financial information by phone, dial toll-free 877-SEG-NYSE. Outside the U.S. and Canada, dial 760-704-4368.

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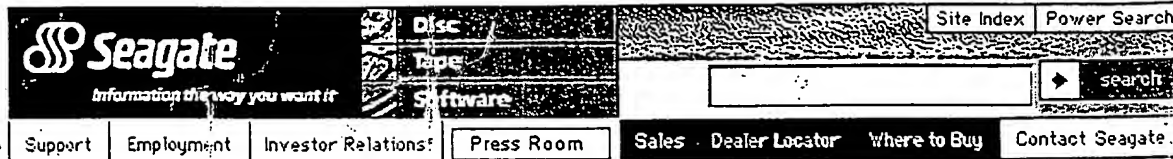
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<sup>1</sup> Top Ten TPC-C Results, sorted by Price/Performance, September 22, 1998. ([http://www.tpc.org/new\\_result/ttpp.idc](http://www.tpc.org/new_result/ttpp.idc))

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### SEAGATE'S ULTRA2 SCSI CHEETAH TO HELP HP NETSERVER SYSTEMS DELIVER HIGH PERFORMANCE, RELIABILITY

*New Server Leverages Seagate's 10,000-rpm Cheetah 9LP to Roar Ahead With Up to Twice the Performance of UltraSCSI-Based Systems*

SCOTTS VALLEY, Calif. — May 26, 1998 — Seagate Technology, Inc. (NYSE:SEG) today announced that its Ultra2 SCSI Cheetah 9LP disc drive will be featured in Hewlett-Packard Company's HP NetServer LH 3 and LH 3r systems, providing an unmatched combination of performance and innovation in primary server storage. The HP NetServer LH 3 system is one of the first servers to take full advantage of the Ultra2 SCSI interface, delivering blazing data transfer rates reaching 80 Mbytes/second, greater reliability with low-voltage differential (LVD) SCSI technology, and a fourfold increase in SCSI device support. The combination of Seagate's innovation in storage products with HP's expertise and leadership in server technology enables customers to get their information when, where, and how they want it.

"We feel that providing Cheetah innovation and technology in our new HP NetServer systems is a definite advantage for our customers," said Eileen O'Brien, worldwide marketing manager of HP's Network Server Division. "We began offering Seagate's first-generation Cheetah 4LP last year. With the second generation Cheetah 4LP Ultra-2 drives, we feel we are delivering an ideal storage solution for users needing a rock-solid workgroup server capable of delivering top performance without the premium price."

"The Cheetah 9LP family of disc drives provides benefits to users that no other Ultra2 SCSI disc drive currently offers," said Phil Detwiler, Seagate's senior vice president of Marketing. "Technological innovation integrated into the Cheetah 9LP enables faster seek times, lower power requirements, and greater environmental flexibility than competing drives. With Seagate's second-generation Cheetah 9LP, our customers will experience an even greater performance increase while also improving on such environmental conditions as power requirements and acoustics."

More than 100 Gbytes of online storage capacity is available with the

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NetServer LH 3, provided by Seagate Cheetah 9LPs integrated in the system. The HP NetServer LH 3 system's support of the Cheetah 9LP's hot-swap capabilities enables administrators to replace disc drives on the fly, minimizing configuration problems and the need for server downtime. Recipient of over a score of industry accolades, the Cheetah 9LP is scheduled to be available with HP NetServer LH 3 and 3r systems beginning this quarter.

#### About Seagate Cheetah Disc Drives

Seagate's Cheetah 9LP is one of the industry's first Ultra2 SCSI disc drives. The Cheetah is also distinguished by its 10,000-rpm spindle speed, which delivers sustained data transfer rates of up to 21.4 Mbytes/second from a single drive. The drive also boasts the world's fastest average seek time of any 3.5-inch, low-profile disc drive — a mere 5.2 msec.

#### About HP NetServer Systems

The complete family of HP NetServer systems consists of two distinct lines of PC servers. The HP NetServer L Series systems are designed as enterprise-application, workgroup or departmental servers. The HP NetServer E Series systems are the first line of servers designed for small- and medium-sized businesses. All HP NetServer systems come equipped with the management software HP TopTools for Servers, and the HP NetServer Navigator featuring easy-to-use tools to configure, install and manage the servers.

Seagate Technology, Inc. is a leading provider of technology and products enabling people to store, access, and manage information. Seagate is committed to providing best-in-class products to help people get their information when, where and how they want it. Seagate is the world's largest manufacturer of disc drives, magnetic discs and read-write heads, an innovator in tape drives, and a leading developer of software for information availability, access and analysis. With over \$7 billion in revenues for its 1997 fiscal year, Seagate can be found around the globe and on the World Wide Web at <http://www.seagate.com>.

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## SEAGATE SHIPS 2.5 MILLIONTH CHEETAH DISC DRIVE

*Milestone underscores Cheetah as brand-of-choice for high-performance, 10,000-rpm disc drives.*

SCOTTS VALLEY, Calif. — March 15, 1999 -Seagate Technology, Inc. (NYSE:SEG) has become the world's first disc drive supplier to announce shipment of two and a half million 10,000-rpm disc drives. The Cheetah family of disc drives, the industry's first 10,000-rpm product and widely recognized as the world's fastest drive, achieved this goal within two years of the product family's first volume shipment. Seagate expects to ship the three millionth drive by the end of the quarter. Seagate's line of Cheetah disc drives will be on display at CeBIT 99 this week in Hannover, Germany.

"Seagate introduced the world's first hard disc drive for personal computers nearly 20 years ago. This milestone again highlights Seagate's position as one of the most recommended and trusted drive brands in the world," said Don Kelly, Seagate's executive vice president of High-End Product Marketing and Planning. "Seagate continues to expand the capabilities of data storage and is at the forefront of today's shift to storage as an area of strategic focus, as we develop new, information-centric computing architectures."

Seagate has shipped three generations of 10,000-rpm disc drives. The Cheetah 4LP/9 was the first generation and immediately dubbed "The world's fastest disc drive" by Byte Magazine, a title that has followed the drive family in ensuing years. The current generation, the Cheetah 9LP/18, doubled drive capacity and introduced the first high-performance disc drive with reduced-diameter media technology for substantially cooler drive operation and faster seeks. The third generation recently announced, the Cheetah 18LP/36, again doubles drive capacity and further lowers power and cooling requirements, thanks to its exclusive Just-in-Time (JIT) seeking technology.

"The incorporation of Seagate's Cheetah family of 10,000-rpm disc drives into Dell's PowerEdge server and PowerVault storage products helps Dell deliver the enhanced performance, throughput, and I/Os per second our customers expect," said Kevin Reinis, director of PowerVault storage marketing for Dell. "Dell's alliance with Seagate has been a key asset as we've worked to quickly bring to market industr-

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leading technologies, such as Fibre Channel and 10,000-rpm disc drives."

"The need for 10,000-rpm drives is quickly shifting from the periphery to the mainstream of enterprise computing," said John Monroe, chief analyst for Dataquest/Gartner Group. "We are now predicting that 10,000-rpm enterprise drive shipments will begin to predominate over shipments of 7,200-rpm enterprise drives late in the third calendar quarter of 1999, primarily due to a change in performance requirements for evolving server and RAID systems. The market for 10,000-rpm (and faster) enterprise drives should grow to constitute in excess of 90 percent of enterprise drive shipments during the year 2001."

Seagate continues to focus on the ability of the Cheetah to be best-in-class for enterprise transaction processing. The high rotational rate, fast seek times, and performance-optimized Advanced SCSI Architecture II (ASA II) enables the Cheetah family to be the disc drive series of choice for the industry's best performance-per-dollar servers, as rated by the Transaction Processing Council.

The Cheetah 18LP and Cheetah 36 offer sustained data transfer rates as great as 28 Mbytes/second. The drives are available with both the Ultra2 SCSI w/LVD interface and Fibre Channel-Arbitrated Loop (FC-AL) interface for sustained data transfer rates reaching 200 Mbytes/second in dual-loop configurations. The drives also leverage Public Loop Support (PLS), which initially debuted in the preceding generation of disc drives. PLS provides the capability of connecting more than 16 million drives to a Storage-Networked, Fibre Channel infrastructure. The combination of FC-AL and PLS truly enables the evolution of Storage Area Networks. The Cheetah 18LP and Cheetah 36 are scheduled to begin volume shipment in April.

Seagate Technology, Inc. (NYSE: SEG) is a leading provider of technology and products enabling people to store, access, and manage information. The Company is committed to providing best-in-class products to help people get information when, where and how they want it. Seagate is the world's largest manufacturer of disc drives, magnetic discs and read-write heads, an innovator in tape drives, and a leading developer of Enterprise Information Management software. Seagate can be found around the globe and on the World Wide Web at <http://www.seagate.com>. For automated news, stock and financial information by phone, dial toll-free 877-SEG-NYSE. Outside the U.S. and Canada, dial 760-704-4368.

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This press release includes forward-looking statements, which are made pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve risks and uncertainties including, but not limited to, decreased product demand and other risks detailed from time to time in the Company's Securities and Exchange Commission filings. Actual results may differ materially from management expectations.

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# CHEETAH 9LP and 18HH AWARDS


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C/Net's gamecenter.com  
Computer Reseller News  
Computer Reseller News  
Maximum PC  
NewMedia Magazine  
PC/Computing  
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PC/Computing  
PEI Magazine  
Smart Computing  
VAR Business  
VAR Business  
Windows Magazine  
Windows Magazine  
Windows Magazine  
Windows Magazine  
Windows Magazine  
Windows Magazine  
Windows Magazine  
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Windows Magazine  
Windows Magazine  
PC Authority (Australia)  
PC Week (Asia)  
MacWorld (France)  
PC Achat (France)  
PC Mag (France)  
SVM Mac (France)  
PC Magazine (Germany)  
CHIP (Germany)  
CHIP (Germany)

## Award Granted

Hard Disc of Choice, Extreme Machine, March 1998  
Ultimate PC Hard Drive, Fall COMDEX, November 1998  
Ultimate PC Hard Drive, PC Expo, July 1998  
Gear of the Year: Best Drive, 12/98  
"Thumbs Up" Award, October 1998  
A-List, July 1999  
A-List, June 1999  
A-List, May 1999  
PC/Computing Best, "Fastest hard drive on the planet," April 1999  
A-List, April 1999  
A-List, March 1999  
A-List, February 1999  
MVP Nominee, November 1998  
Overall Best Hard Drive, January 1999  
Best Product of the Year-Network Storage Devices, 12/98  
Top 5 Computer Products of 1998, November 16, 1998  
Recommended SCSI Hard Drives, April 1998  
WinList, January 1999  
WinList, July 1999  
Win 100, June 1999  
WinList, May 1999  
WinList, March 1999  
WinList, February 1999  
WinList, December 1998  
WinList, November 1998  
WinList, October 1998  
WinList, September 1998  
"Cheetah Breaks Speed Record," WinList, August 1998  
Recommended award, June 1998  
RAID Storage Gold Award, December 1998  
The MacWorld Choice: the fastest (LVD), May 98  
Nominated 1999 Best Product, January 1999  
Editor's Choice: For video and workstation, June 98  
Editor's Choice, March 1999  
Winner of the test (SCSI), May 98  
Top SCSI HDD, January 1999  
First Place, November 1998

CHIP (Germany)	Product of the month, September 98
Macwelt (Germany)	Winner of the Test, July 98
PC Intern (Germany)	PC Intern Award, November 1998
PC Magazine (Germany)	SCSI disc drive benchmark winner, September 98
PC Professionell (Germany)	Editor's Choice, June 98
Chip (India)	Gold, Silver, and Bronze Awards, SCSI Disc Drives, December 1998
PC Sarang (Korea)	Best HDD for the Perfect PC, September 1998
PC Shopper (Korea)	Recommended buy, October 1998
YongSan Electronics (Korea)	Product of the Year, December 1998

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## SEAGATE HARD DISC DRIVES SWEEP TOP INDUSTRY AWARDS

*From the Fast and Cool Cheetah 9LP to the Desktop-Leading Medalist Pro 9140, Seagate Garner Editorial Praise for its Storage Products*

SCOTTS VALLEY, Calif. -- April 20, 1998 -- The first quarter of 1998 began with a bang for Seagate Technology, Inc.'s (NYSE: SEG) Cheetah, Barracuda, and Medalist Pro disc drive families. Leading industry publications from around the world have distinguished Seagate disc drives 24 times over the past three months, with recognition coming from such well-known voices as PC Computing, Computer Reseller News, Computer Shopper, C|NET, New Media Magazine, AV Video and Multimedia Producer, boot, Computer Gaming World and IT Times. The editorial praise for Seagate storage products affirms the Company's continuing leadership in delivering best-in-class products to help people store, access and manage their information.

"Clearly, we are very honored to be recognized by so many leading industry experts already this year," said Phil Detwiler, Seagate's senior vice president of Marketing. "The product line-up we provide our customers continues to highlight Seagate's innovation, quality and value. The products include the new Cheetah 9LP, which has reduced power by up to 25% from earlier-generation and competing 10,000-rpm products, to the Medalist 9140, the industry's first and only 7,200-rpm Ultra ATA disc drive. While Seagate has received the awards, the real winners are our customers."

Computer Reseller News began the year picking the Cheetah 9LP as its Editors' Choice in SCSI hard discs. "The CRN Test Center gave its Editors' Choice award to Seagate for its Cheetah 9LP, a superior performer backed by a company that truly acknowledges that resellers will be the key players in the channel-assembly and build-your own markets," the review stated. "The Cheetah 9LP turned in the fastest

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transfer rate of all drives reviewed under all conditions, making it suitable for any application where 9 Gbytes of storage is sufficient."

PC/Computing recognized Seagate storage products six times in the first three issues of 1998. Both the Barracuda 18 and Medalist Pro 9140 received "A-List" recommendations in the January, February and March editions of the publication. "File management? Why bother? With a drive this big and fast you can just save it all," wrote the editors about the Medalist Pro 9140, while the Barracuda 18 was touted as the "mother of all hard drives."

New Media Magazine picked the Cheetah line of disc drives as the overall Storage Product of the Year in its March issue, beating out both removable storage devices and conventional hard drives. "Seagate has managed to maintain its lead in AV hard drive performance for several years now, first with the Barracuda series, and now with the second-generation 10,000-rpm Cheetah drives, the first to break the 7,200-rpm barrier for desktop hard discs," wrote the magazine. "Synonymous with both speed and reliability," Cheetah drives used in arrays were cited as "the first choice of discerning multimedia professionals."

Seagate Technology, Inc. is a leading provider of technology and products enabling people to store, access and manage information. Seagate is committed to providing best-in-class products to help people get their information when, where and how they want it. Seagate is the world's largest manufacturer of disc drives, magnetic discs and read-write heads, an innovator in tape drives, and a leading developer of software for information availability, access and analysis. With over \$7 billion in revenue for the last twelve months, Seagate can be found around the globe and on the World Wide Web at <http://www.seagate.com>

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